Check List **4**(4): 424–426, 2008.
ISSN: 1809-127X

NOTES ON GEOGRAPHIC DISTRIBUTION

Fish, southernmost record of *Astyanax pampa* (Ostariophysi, Characiformes, Characidae)

Cristian Hernán Fulvio Pérez

Centro Nacional Patagónico (CENPAT) – CONICET.
Bvd. Brown 2825, Pto. Madryn (U9120ACF), Chubut, Argentina. E-mail: liolaemu@criba.edu.ar

Astyanax is the most common and diversified genus of family Characidae, comprising more than a hundred species and occurring in a variety of environments of Neotropical Region (Ringuelet 1975). *Astyanax pampa* was first described for the stream *Las Mostazas*, a coastal Atlantic drainage in the province of Buenos Aires.

Currently, *A. pampa* known distribution includes type locality and the lower catchment area of Colorado River. This environment belongs to the southern limit of Brazilian subregion, which is characterized by small autochthonous streams (with the exception of the Colorado River) (Casciotta et al. 1999). Its southernmost limit is Colorado River between the provinces of *Río Negro* and *La Pampa* (Almirón et al. 1997). The aim of this communication is to document the presence of *A. pampa* in the Negro River.

Between 1985 and 2007, surveys were carried out on irrigation channels in Chimpay, Avellaneda Department, Río Negro province, Argentina (aprox. 39°10' S, 66°9' W, Figure 1). Surveys took place from May to July when the water inflow from the Negro River is interrupted, hence irrigation channels do not carry water, and fish concentrate in small pools being easily caught using hand nets.

This surveys, and studies made before 2007 (Almirón et al. 1997, Baigún et al. 2002, Pascual et al. 2002, Pascual et al. 2007, Alvear et al. 2007) revealed the presence of 14 fish species (*Oncorhynchus mikiss, Salmo trutta,* Salmoniformes; *Galaxias maculates,* Osmeriformes; *Percichthys colhuapiensis, P. trucha,* Perciformes; *Cnesterodon decemmaculatus*, *Jenynsia multidentata,* Cyprinodontiformes; *Corydoras paleatus*, *Diplomystes viedmensis*, *Hatcheria macraei,* Siluriformes; *Cheirodon interruptus,* Characiformes; *Odontesthes bonariensis*, *O. microlepidotus*, Atheriniformes; and *Cyprinus carpio,* Cypriniformes) but no *Astyanax* species were registered.

On 10 June 2007, however, one specimen of *Astyanax* (60 mm standard length, Figure 2) was obtained in the irrigation channels. This specimen was identified with help of J. Casciotta as *A. pampa*. *Astyanax pampa* can be distinguished from the similar *Astyanax eigenmanniorum* by the lower number of branched anal fin rays (17-20 vs. 22-24 respectively, Casciotta et al. 2005). The voucher specimen was deposited in the CNPICT (*Centro Nacional Patagónico* - CONICET ichthyological collection) under number CNPICT 2007/1, Puerto Madryn (Chubut), Argentina.

Astyanax pampa is therefore added to the list of recently discovered species in the Río Negro basin such as *Cheirodon interruptus*, *Corydoras paleatus* and *Cyprinus carpio* (Baigún et al. 2002).

As *A. pampa* was not registered during the 22 year of surveys in the Río Negro drainage, nor cited by others authors who studied the local fauna (Almirón et al. 1997, Baigún et al. 2002, Pascual et al. 2002, Pascual et al. 2007, Alvear et al. 2007), the most reasonable explanation for its occurrence in this basin seems to be the artificial human introduction, and not a natural range expansion. Future observations should reveal if this species will establish a viable population in the area.

Check List **4**(4): 424–426, 2008.
ISSN: 1809-127X

NOTES ON GEOGRAPHIC DISTRIBUTION

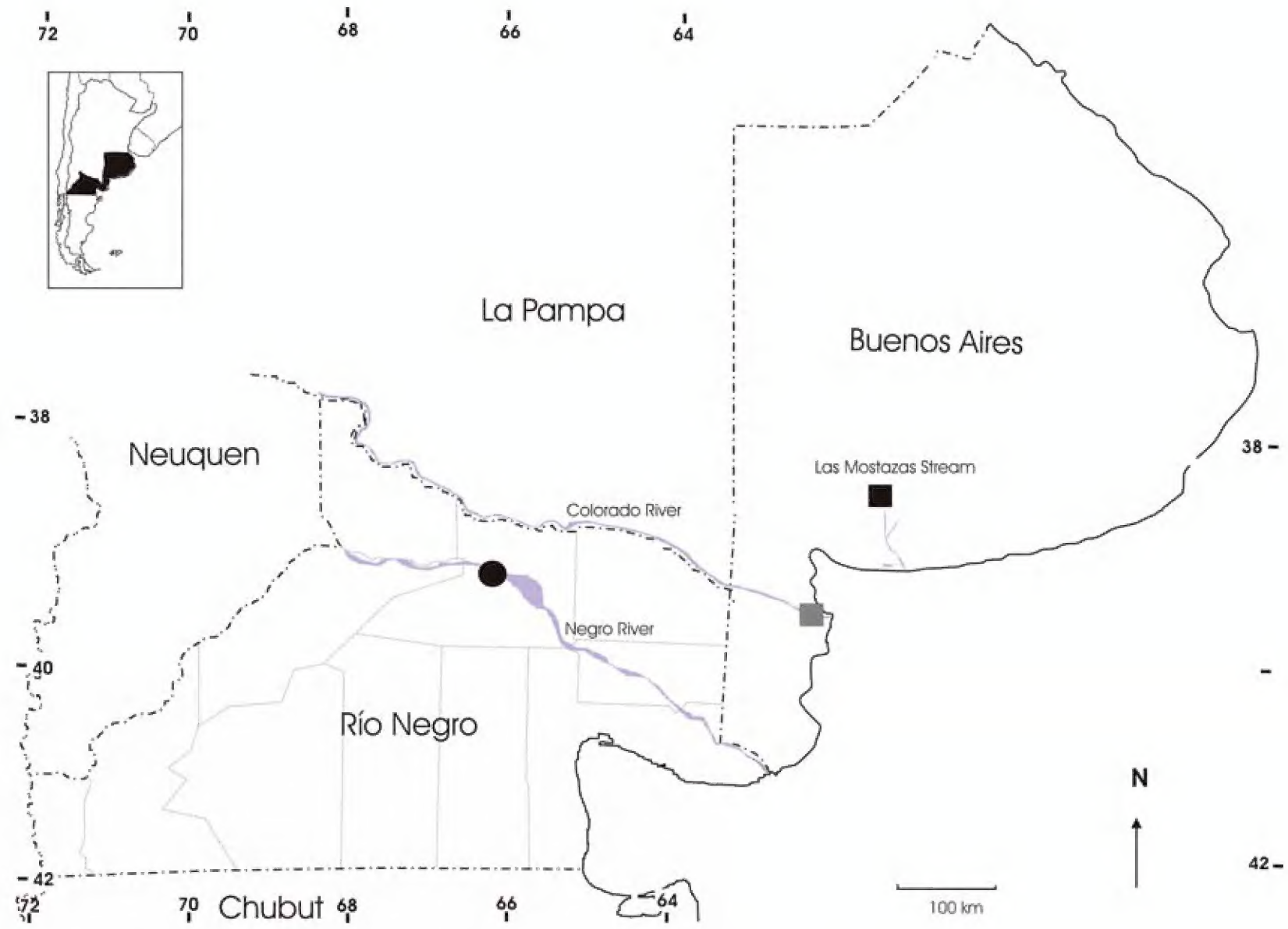

Figure 1. Map of the Río Negro and Buenos Aires provinces, Argentina, indicating the study site (black dot), and the only two known localities for *Astyanax pampa* before the present study (black square: locality type; gray square: lower area of Colorado River).

Figure 2. *Astyanax pampa*, 60 mm SL, from Chimpay, Río Negro province, Argentina.

Check List **4**(4): 424–426, 2008.
ISSN: 1809-127X

NOTES ON GEOGRAPHIC DISTRIBUTION

Acknowledgments

I am grateful to Atila Gosztonyi and Jorge Casciotta for their valuable help in obtaining bibliography and for their general advice. Also, I thank Víctor Narváez and the children from Chimpay for their enthusiasm and help with sampling.

Literature cited

Almirón, A., M. Azpelicueta, J. Casciotta, and A. López Cazorla. 1997. Ichthygeographic boundary between the Brazilian and Austral subregions in South America, Argentina. Biogeographica 73(1): 23-30.

Alvear, P. A., M. Rechencq, P. J. Macchi, M. F. Alonso, G. E. Lippolt, M. A. Denegri, G. Navone, E. E. Zattara, M. I. García Asorey and P. H. Vigliano. 2007. Composición, distribución y relaciones tróficas de la ictiofauna del río Negro, Patagonia Argentina. Ecología Austral 17(2): 231-246.

Baigún, C., G. López, A. Domanico, R. Ferriz, S. Sverlij and R. D. Schenke. 2002. Presencia de *Corydoras paleatus* (Jenyns, 1842), una nueva especie brasílica en el norte de la Patagonia (Río Limay) y consideraciones ecológicas relacionadas con su distribución. Ecología Austral 12: 41-48.

Casciotta, J., A. E. Almirón, A. Cione and M. Azpelicueta. 1999. Brazilian freshwater fish assemblages from southern Pampean area, Argentina. Biogeographica 75: 67-78.

Casciotta, J. R., A. E. Almirón and M. Azpelicueta. 2005. *Astyanax pampa* (Characiformes, Characidae), a new species from the southernmost boundary of the Brazilian subregion, Argentina. Revue Suisse de Zoologie 112(2): 401-408.

Pascual, M., P. Macchi, J. Urbanski, F. Marcos, C. Riva Rossi1, M. Novara and P. Dell'Arciprete. 2002. Evaluating potential effects of exotic freshwater fish from incomplete species presence–absence data. Biological Invasions 4: 101–113.

Pascual, M., V. Cussac, B. Dyer, D. Soto, P. Vigliano, S. Ortubay and P. Macchi. 2007. Freshwater fishes of Patagonia in the 21st Century after a hundred years of human settlement, species introductions, and environmental change. Aquatic Ecosystem Health and Management 10: 212–227

Ringuelet, R. A. 1975. Zoogeografía y ecología de los peces de aguas continentales de la Argentina y consideraciones sobre las áreas ictiológicas de América del Sur. Ecosur 2(3): 1-122.

Received April 2008
Accepted July 2008
Published online October 2008